DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023894 Address: 333 Burma Road **Date Inspected:** 20-May-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: Mr. Shi Lei **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG Segment**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – NWIT Document No: 009183

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment 13CW. The weld designations reviewed are as follows:

- 1. SEG3015K-235
- 2. SEG3015H-283
- 3. SEG3015H-200
- 4. SEG3015F-209

Magnetic Particle Testing (MT) – NWIT Document No's: 009186

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Segment 13AW. The weld designations reviewed are as follows:

1. SEG3013E-226

WELDING INSPECTION REPORT

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OBG Trail Assembly Yard

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) welding of weld joint SA3122-019-008 and 011 located on side plate connected SA3122 at panel point 121 to 121.5 FL2 side of OBG Segment 13BW. ZPMC Welder is identified as 066695. ZPMC Quality Control (QC) is identified as Mr. She Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

Shielded Metal Arc Welding (SMAW) welding of weld joint SEG3015H-207 located on vertical plate to floor beam at panel point 123 of OBG Segment 13CW. ZPMC Welder is identified as 044541. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-4G-(4F)-FCM-Repair-1, which is used as per Welding Repair Report (WRR) B-WRR-20901.

SMAW welding of weld joint SEG3015A-012 located on side plate to bottom plate hold back weld of OBG Segment 13BW. ZPMC Welder is identified as 057220. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-B-U2-FCM-1.

FCAW welding of weld joint SA3126-017-005 and 007 located on bottom plate connected SA3126 at panel point 123 to 123.5 FL2 side of OBG Segment 13CW. ZPMC Welder is identified as 045143. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

FCAW welding of weld joint SA3127-005-009 and 011 located on bottom plate connected SA3127 at panel point 124 to 124.5 FL2 side of OBG Segment 13CW. ZPMC Welder is identified as 066825. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

FCAW welding of weld joint SA3126-016-005 and 007 located on bottom plate connected SA3126 at panel point 123 to 123.5 FL2 side of OBG Segment 13CW. ZPMC Welder is identified as 045240. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

This QA inspector observed ZPMC personnel performed Ultrasonic Testing (UT) on Side Plate I-rib to Floor Beam Welds at Panel point 120 cross beam side of OBG Segment 13AW. See the attached picture.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

WELDING INSPECTION REPORT

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar, Vibin	Quality Assurance Inspector
Reviewed By:	Patel, Hiranch	QA Reviewer